CS2810 Math of Data Models	Prof Higger
Spring 2022	Jan 28, 2022

Ethics ICA

Due: Jan 28, 2022

Instructions:

- Work in a group to complete the task below, groups should have no more than 5 members (gradescope won't allow more than 5 during submission).
- Given this is a group activity, please use google docs or similar to ensure all may edit the document in parallel (you won't finish in time with only one writer). Don't worry if the writing is a bit disjointed with multiple authors, we're looking for content rather than writing elegance.
- Your final "report" will be submitted to gradescope as a group submission in pdf format. Please be sure to enter all group member names so credit is properly assigned. You need not submit any earlier ICAs today to gradescope.

Problem 1 Ethics ICA

Your group goal is to create a 1-2 page mini report which describes the ethical implications of a particular technology within Machine Learning. Groups are expected to chat and share their thoughts for 15 minutes and then divide and conquer for another 15 minutes to write the report.

• Title:

An informative title.

• Introduction:

Give an example of a Machine Learning / Artificial Intelligence technology which has (or is likely to have) a large impact on how people live their lives. Your writing should be easily understood by non-technical experts (e.g. write so your grandparents understand too)

- Describe, in detail, the data which is collected which trains the model.
- Who creates this technology and why do they build it?
- Include at least one web link where readers can read background on the technology.

• Positive / Negative Characterizations:

List 5 of the most salient impacts that the technology has on people's lives. Let "positive" be defined as helping people lead happier more content lives For each impact:

- Assign a score to this impact:
 - * Positive impacts should receive large values
 - * Neutral impacts receive a score of 0

¹Or redefine it as you see fit, but mention this in a sentence or two at the outset of this section so readers follow along

* Negative impacts receive more negative values

Write the score at the outset of the paragraph in the format (+2) or similar Scores should be scaled so that a positive impact score of 2 is, according to the authors, twice as positive as an impact score of 1. Additionally, an impact score of -1 should roughly negate another impact with a score of 1^2

- Write a few sentences which characterize the impact. All sentences should be true and, ideally, activate your readers so they are excited about positive impacts and concerned about negative impacts.

• Synthesis:

Summarize the overall impact in a single, bolded sentence. Describe two to three things which can be done to minimize the negative impact or enhance the positive impact of this technology. To the best extent possible, recommend actions which are both effective and practical.

²I feel like that linearity definition is lurking around here somewhere...:)